

1. (original) A computer implemented method for extracting hierarchical data from one or more tables in a database, the method comprising:

- a. receiving user input identifying, at least, one or more tables in the database that contain the hierarchical data and the hierarchical structure of the hierarchical data;
- b. generating a Structured Query Language (SQL) statement using the user input received in step (a) ;
- c. presenting the SQL statement to the database for execution; and,
- d. extracting the hierarchical data from the database in response to the execution of the SQL statement.

2. (original) A method according to claim 1, wherein the user input identifying the hierarchical structure indicates at least a column of one of the database tables that represents the parent items of the hierarchical structure and a column of one of the database tables that represents the child items of the hierarchical structure.

3. (original) A method according to claim 2, wherein the data value that is the top of the hierarchical structure has a default value of NULL.

4. (original) A method according to claim 2, wherein the user input identifying the hierarchical structure indicates the data value in the column representing the parent items that is the top of the hierarchical structure.

5. (original) A method according to claim 2, wherein the user input identifying the hierarchical structure indicates at least one further column of one of the tables that further restricts the hierarchy.

6. (original) A method according to claim 1, wherein, prior to generating the SQL statement, further user input is received, the user input indicating at least one column of one of the database tables on which leaf sum aggregation should be performed.

7. (original) A method according to claim 1, wherein, prior to generating the SQL statement, further user input is received, the user input indicating at least one column of one of the database tables on which tree sum aggregation should be performed.

8. (currently amended) A method according to claim 1, wherein the SQL statement is generated from the user input by:

- i. constructing object SQL statements executable to ~~that will~~ return all the database items identified by the user input;
- ii. constructing object SQL statements executable to calculate a ~~that~~

- ~~calculates the~~ level of an item in the hierarchical structure;
- iii. constructing object SQL statements executable to calculate a ~~that~~
~~calculates the~~ number of child items appendant to an item in the hierarchical
structure; and,
- iv. combining the object SQL of steps (i) to (iii) ~~in~~ to form a single object
SQL statement.

9. (currently amended) A method according to claim 6, wherein the SQL statement is generated from the user input by:

- i. constructing object SQL statements executable to ~~that will~~ return all the
database items identified by the user input;
- ii. constructing object SQL statements executable to calculate a ~~that~~
~~calculates the~~ level of an item in the hierarchical structure;
- iii. constructing object SQL statements executable to calculate a number of
child items appendant to an item in the hierarchical structure;
- iv. constructing object SQL statements executable to perform a ~~that~~
~~performs the~~ leaf sum aggregation; and
- v. combining the object SQL of steps (i) to (iv) ~~in~~ to form a single object
SQL statement.

10. (currently amended) A method according to claim 7, wherein the SQL statement is generated from the user input by:

- i. constructing object SQL statements executable to that will return all the database items identified by the user input;
- ii. constructing object SQL statements executable to calculate a that ~~calculates the~~ level of an item in the hierarchical structure;
- iii. constructing object SQL statements operable to cause a computer to calculate a that calculates the number of child items appendant to an item in the hierarchical structure;
- iv. constructing object SQL statements executable to perform a that ~~performs the~~ tree sum aggregation; and,
- v. combining the object SQL of steps (i) to (iv) ~~in~~ to form a single object SQL statement.

11. (original) A computer program comprising computer program code means adapted to perform the steps of claim 1 when said program is run on a computer.

12. (original) A computer program product comprising program code means stored on a computer readable medium for performing the method of claim 1 when said program product is run on a computer.